

**Amendment to the Abstract:**

The Abstract has been amended. A revised Abstract is attached.

The invention relates to a circuit for producing potentially separated synchronization (sync) impulses from an alternating voltage network. In a voltage divider ( $R_1, R_2$ ) for the switch input of a semiconductor switch ( $T_1$ ) which is applied to a rectified network voltage by means of a half-wave rectifier ( $D_1$ ), the emitter diode ( $D_0$ ) of an optical fiber coupler ( $OKO$ ) is switched to the working circuit of the switch ( $T_1$ ) which is serially connected with said emitter diode ( $D_0$ ) and comprises a preresistor ( $R_3$ ) making it possible to periodically charge a storage capacitor ( $C_2$ ) which is dischargeable by the emitter diode ( $D_0$ ). At least one transistor ( $T_2, T_3$ ) is connected downstream of the receiving element ( $EO$ ) of the optical fiber coupler ( $OKO$ ) which is powered by a voltage source ( $U_B$ ) galvanically separated from the network and whose substantially rectangular synchronization impulses (sync) are provided in the working circuit.

Fig.